

**ABSTRACT**

Provided are methods and apparatuses for extracting, transporting and/or releasing various kinds of material. Generally speaking, such methods and apparatuses involve vacuum-based (or low-pressure-based) components which, 5 in the preferred embodiments of the invention, utilize various combinations of: a gateway that functions as a valve without moving parts, flexible hoses, and/or a separator for separating the solids in the material from the liquids. Such methods and apparatuses are useful in a variety of applications, including landfill-well cleanout and home-based, laboratory-based, commercial-based and 10 manufacturing-based applications. The tools according to the present invention generally are scalable to nearly any size.